CITY OF ROCKVILLE HISTORIC DISTRICT COMMISSION STAFF REPORT

for December 17, 2009 MEETING NO. 11-09

APPLICATION: HDC2010-00486
ADDRESS: 401 S. Horners Lane

Pump House

ACCEPTED: 11/23/09 **45 DAY LIMIT:** 1/15/2010

OWNER: Mayor and Council

City of Rockville

REQUEST: Approve exterior alterations, with

Conditions

STAFF: Robin D. Ziek



PROJECT SUMMARY:

The exterior aspects of the renovation project for the Pump House include changes to landscaping, doors, windows, and the cupola. The HDC commented on the project with a Courtesy Review in May 2009. The applicant is poised to send the project out to bid, and asks for HDC approval of exterior alterations.

STAFF RECOMMENDATION: Staff recommends approval with Conditions, given the following findings:

The proposed renovation of the Pump House meets the Secretary of the Interior's Standards for Rehabilitation. The project includes the restoration of original openings for window and the front door, which had been reduced in size over time. The proposed removal of existing landscaping will restore the view of the historic structure, and the HDC will review future proposals for new landscaping. Overall, the essential form and integrity of the historic property will be unimpaired. The work meets the Secretary of the Interior's Standards #2 ("The historic character of a property shall be retained and preserved.") and #6 ("Deteriorated historic features shall be repaired rather than replaced. Where replacement is warranted, the new feature shall match the old in..., where possible, materials....); and #9 (..Exterior alterations shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible...). (See Circle 45.)

[DRAFT MOTION OF APPROVAL:]

Finding HDC2010-00486, for rehabilitation of the Pump House, in compliance with Secretary of the Interior's Standards #2, #6, and #9, and finding no negative impact on the architectural

significance of the building with this proposal, I move approval of the application, with the following conditions:

- 1) There should be some differentiation between the old and new lintels with the installation of new doorways on the west and north elevations;
- 2) The exterior light fixtures should be selected to be compatible with the Victorian date of the building and, in addition, reflect the historic residential setting of the building by reducing intrusive glare;
- 3) The HDC will be provided with specifications for the mortar to assure that the new mortar will be softer than the existing brick.
- 4) The proposed signage for the building will not include pin letters in the brickwork. A free-standing sign, with address number in the transom will be used instead.
- 5) The secondary doors will use the metal panelized door design.









BACKGROUND: The Pump House is a significant historic resource in the City of Rockville, and was designated as a historic district in 2005. It is a distinctive building type, and marks the late 19th century establishment of a public water system in the City of Rockville. It currently serves as a

community center and is used by the local East Rockville Civic Association, as well as community groups including Boy Scouts, Girl Scouts, and The Finest (a student study and dance program). The project has been scheduled since 2003 in the Capital Improvements Program (CIP), and design development officially began in December 2008. The architect is Proffitt & Associates. They are based in Frederick, Maryland and have considerable experience with historic structures.

Property Area: 20,000 sf. **Structure Area:** 1,600 sf.

Zone: Park

City of Rockville Permits Required: HDC Certificate of Approval, Building Permit

Historic Significance: The Pump House is a good example of Victorian-era public architecture, with its monumental massing and interest in detailing evidenced by the use of stone lintels and corner pilasters. It was constructed in East Rockville in 1897, while Joseph Reading was Mayor and on land purchased from his father, William Reading. It is associated with the development of the citywide water system and public electric lighting and, after the Typhoid Epidemic of 1913/14, was instrumental in moving the city to the development of a citywide sewerage system.

DISCUSSION OF THE PROPOSED PROJECT and MATERIALS:

Rehabilitation Standards

The renovation project will address numerous issues that have arisen with the change of use of this building over time. The Pump House has served as the offices for the City's Department of Public Works, as the first Senior Center, and as a Community Center for East Rockville. The proposed project will use the Secretary of the Interior's Standards for Rehabilitation, recognizing that the building will continue to be used for a function that differs from the original design function.

106 Review

The project will also bring the building up to code, meeting requirements for egress, bathroom facilities, handicapped accessibility, and energy efficiency. The City has obtained Federal funding to help pay for energy-related items in the project, including the new thermally-glazed windows, insulated exterior doors, and interior insulation. Because of this funding source, the Maryland Historical Trust (Maryland's State Historic Preservation Office) will be conducting their "106 Review," thus providing additional oversight from a historic preservation point of view. The 106 Review will provide MHT review and comments on the project, which will be conveyed to the HDC when received.

Masonry Work - Interior Repointing

While the HDC has no authority over interior changes, staff notes that what had been exterior brick on the north elevation, is now an interior wall in a storage room, and this needs to be repointed. In addition, the central internal brick walls need repointing. The site is moist, by definition, and there has been deterioration of the mortar during the past 112 years, indicating that the building was well constructed and has stood the test of time. However, all brick

buildings eventually need to be repointed, and this project provides the City with that opportunity. As this aspect of the project was unanticipated, it presented a funding challenge in the overall scope of the project. In response to this need, additional funding for energy-related portions of the project was acquired, which will free-up some funding for the repointing.

It is highly important that the architect specify use of a mortar that is softer than the brick, the science of which is summarized in Technical Guide #14, Masonry (see Circle 9-10). One way to assure that the new mortar is softer than the existing brick is to match the original 19th century mortar through chemical testing. Regardless of the approach, the HDC should be notified, on a Courtesy Review basis, of the mortar specifications to reflect their concern for the long-term preservation of the building. Use of a mortar that includes a high percentage of Portland cement will cause rapid deterioration of the bricks, and therefore, of the building.

In conjunction with this, the proposed installation of individual letters with pins into the mortar will introduce opportunities for moisture penetration and deterioration of the wall. After discussion with the project director and architect, a different approach has been proposed. This will include the building address within the new transom to meet fire safety requirements, and a free-standing sign with the building's name.

Windows

Interior modifications, including the removal of an existing dropped ceiling, will permit the City to reveal the windows in their original size and configuration. The original openings are apparent with extant lintels and modifications to the brickwork, which can be seen on the exterior. There is only one original window remaining in the building, at the attic level on the rear (west) elevation. This 2/2 serves as a model for the new windows, but cannot be retained in place because of the proposed installation of a fresh air louver to serve the new HVAC system. Use of this opening for fresh air intake means that no new opening will be required through the brick load-bearing walls. The window should, however, be retained on site, or perhaps donated to a preservation group for archiving.

The new windows are proposed to be 2/2 design, and aluminum-clad thermally-glazed wood material. The new windows will be of substantial size, and the wood substrate has the structural strength to maintain the maximum glazing area. The proposed use of cladding on the exterior (with wood on the interior) will help allow the City to budget maintenance (wood repair and painting) of original wood materials, including soffits, facia boards, and window trim (see Circle 26-27, 44).

The Technical Guide #3, Doors and Windows (see Circle 11-13), discusses the policy to retain original doors and windows. As these have already been removed from the site, the Tech Guide recognizes the use of thermally-glazed true-divided-light windows as a suitable replacement. "Wood is the preferred material" and the proposed replacement windows are wood, albeit aluminum clad on the exterior. The Secretary of the Interior's Standard #6 notes that new work may not match original materials: "Deteriorated historic features shall be repaired rather than replaced. Where replacement is warranted, the new feature shall match the old in,... where possible, materials."

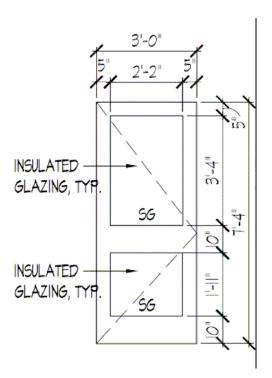
Doors

The current **front** door, with uneven door leafs, is not an original feature. The size of the original doorway, however, is discernable in the brickwork and with the original lintel at a distance above the current doorway.

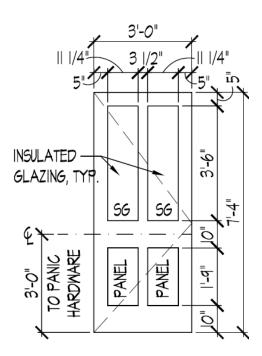
The applicant proposes two different options for the front door:

- 1) Install a modern interpretation of the traditional front door with transom-and-sidelights. The new door is proposed as 90% glass, with a heavy aluminum frame that delineates a top and bottom area of glazing (see Circle 22-25, 40-41); or
- 2) Install a more traditional front door design, with a solid paneled door, within the same transom-and- sidelights design. The new door will have glazed panels above and solid panels below (see Circle 22-25, 42-43).

#1 Proposed metal door with large glazed panels



#2 Proposed panelized metal door with glazed panels above and solid panels below



This proposed modern doorway is an interpretation of a typical historic doorway. A quick comparison with other waterworks buildings (the Fairmount Water Works – 1822; Hooton (England) Waterworks – c1890; Tallahassee Waterworks – 1889 see Circle 28-30) indicates that elaborate doors, glazed or solid, were used, and they incorporated transoms. Cities were very proud of these structures, which indicated a commitment to the future and an eagerness to

provide modern amenities to their citizens. While we may look at these today as "utilitarian structures," municipalities that built them in the 19th century incorporated high style detailing (see Circle 28-30).

In Rockville, such detailing includes the decorative brickwork on the rear chimney, stone lintels above doors and windows, corner pilasters, and wide eaves around the building. These details reflect the late Victorian era, and are stylistic elements that are part of the architectural character, and reflect the importance of the building.

Staff thanks the architect for providing options for HDC consideration. The solid front door is more typical, certainly, in residential use. The HDC should evaluate this part of the project in light of the public use of the building.

The other three doorways have a secondary function. The door on the north side (existing) is required for egress from the main meeting room. The doorway on the west side closest to the parking lot (existing) is also required for egress from the smaller meeting room/kitchen. The new rear door on the west façade is proposed in order to provide access to the new HVAC equipment, which is being installed in the non-original concrete block addition to the Pump House. The doors will be hollow-core metal doors, either painted or with factory finish. The panelized door, however, is more compatible with Victorian design than a modern flush door, and staff recommends this design for the secondary doorways.

Lintels

The drawings indicate lintels over the doorways on the west elevation with the same graphic character as the original lintels on the east elevation, seeming to indicate lintels that will match the historic lintels (compare Circle 32 & 33). This could be misleading, and would not meet the Secretary of the Interior's guidance (Standard #9), which notes that new work shall be differentiated from the old. The reasoning is that a person should be able to easily see, and appreciate, the remaining original materials in the building, while understanding that the new work is *compatible*. The new lintels, therefore, should either have a different finish, or clearly be a different material. The difference may be subtle, but should be easily discernable.

Cupola

New louvered panels, designed to replicate the original louvered panels, will be installed in the cupola, replacing existing plywood. The louvers will provide ventilation, as originally planned. The new louvers will be made of finished aluminum, instead of wood. Staff supports this, as the cupola is inaccessible and at sufficient distance from the public that the finished aluminum will not be seen as an intrusive element.

¹ This addition was installed mid-20th century, and housed pumps that were used after the new waterworks was built on the Potomac. The pumps continued to function in conjunction with the City's waterworks, to pump water drawn from the Potomac up to the water tower on Grandin Avenue. The rest of the building was then used for other functions.

OTHER CONSIDERATIONS:

Landscape materials and Grading

The mature shrubs around the Pump House are proposed to be removed, including the shrubs along S. Horners Lane that hide the front (east) elevation of the building and block the front windows as well. Corner evergreens will also be removed. All of this plant material is too close to the building and prevents adequate ventilation of the exterior bricks. In addition, the removal of the plant material will reveal the building to view, and staff urges the HDC to approve the removal of this existing plant material.

The project will include some modest grading to accommodate ADA at the north side and west rear elevations. Concrete slabs that will be ADA compliant will be installed at each (3) of the exterior doors: two on the west elevation and one on the north elevation. In addition, the walkway at the front entrance will also be modified to comply with ADA. All of this work is essentially at grade, and there is no need for ramps or other exterior structures to provide ADA accommodation.







East elevation detail of shrubs by front

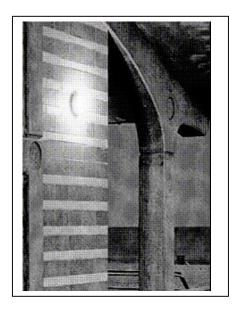
The City plans to work with the community at a future date to develop a landscape plan. This shall be presented to the HDC prior to moving forward with implementation. In addition, it may be useful to include a representative of the HDC on the community landscape group.

Lighting

The applicant proposes a modern light fixture for surface mounting on the exterior wall of the Pump House, by the front door (See A3.1) and by the rear door nearest to the parking lot (see

A3.2). Product information sheets provided (see Circle 20-21) show the modern design and its application on a building.





Staff estimates that, despite the cutoff shield at the top, there will be glare from this fixture at the door, and this is not compatible with the residential neighborhood, an element of the environmental setting for the Pump House.

In addition, the design of the fixture itself is out of character with the building and may be jarring. Staff recommends selection of another light fixture that will not replicate Victorian lighting, but more compatible than the proposed fixture. As there are street lights in this immediate vicinity, the fixture by the door need not light up the environs of the building, as much as focus light at the front doorway.

COMPLIANCE WITH GUIDELINES:

Staff recommends that the proposed renovation, with some minor modifications **as suggested with added Conditions**, meets the Secretary of the Interior's *Standards for Rehabilitation* # 2, by restoring the size of original openings; and #6, by matching historic evidence with the proposed new windows, and repointing the brick, and installing signage that does not introduce potential damage to the brickwork; and #9, by selecting new materials for the doors and windows that are compatible but differentiated from original materials (see Circle 45).